

Work Order ID 162402

Tuesday, June 06, 2017 4:57:32 PM

162402

Page 1

Item ID: 647.3704 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: 204,205,212,214 Cable Cutter System, High
 Start Date: 6/9/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/21/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21** Date: **JUN 12 2017** Pooling: Date: Run Start ***NR1***
 QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.3700	NC3	JUN 26 2017 DAS 6							
100	Document Control	0.009				DAS 27			
100	DOCUMENT CONTROL					9-89			
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 647.3704								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.03				DAS 27			
Quality Control						9-89			

17/6/27

JUN 26 2017 **DAS 6** **DAS 28**

17/6/27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 162402

Tuesday, June 06, 2017 4:57:32 PM

162402

Page 2

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Start Date: 6/9/2017 Start Qty: 1.00 ***1*** Cust Item ID:
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Packaging	Identify as per dwg & Stock Location: _____ Packaging Memo Identify and pack for shipping as per PPP 647.3704 Location: _____ fs 102	0.00 0.00							
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.10							

DAS
27
9-29
7/6/27

DAS
21
9-29
JUN 27 2017

JUN 27 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By .																	
								Lead hand / Supervisor Approval Verification																	
										QC / QA Coordinator Approval															
Root Cause				FAULT CATEGORY																					
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐	Power Loss/Surge ☐	☐	Positioned Wrong ☐															
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐	Folio/Program ☐	☐	Outside Dimensions ☐															
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐	Grain ☐	☐	Over/Under tolerance ☐															
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐	Weld ☐	☐	Part Incorrect ☐															
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐	Wrong Stock Pulled ☐	☐	Part Lost/Missing ☐															
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐	Out of Sequence ☐	☐	Part Moved ☐															
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐	Off-set ☐	☐	Drawing ☐															
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐	Mislabeled ☐	☐	Finish ☐															
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐	Fit/Function ☐	☐	Misread ☐															
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐	Misaligned/off center ☐	☐	Turning Sequence ☐															
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :																						
Misidentified ☐	☐	Past Due ☐																							

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 96

Work Order ID: 162402

162402

Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 12.10.26 NEW ISSUE DD VERF:JLM
REV:B 15.01.26 as per ecr 14-214 DD VERF:JLM
PER REV NC3 15.03.18 JLM VERIFIED BY:DD

IPP
IPP REV:C AS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
601.3082 *601 3082* RIVER CR3212-4.2		Purchased	No			110	Each	0.0000	6	6			
647.3903 *647 3903* Deflector Assembly		Manufactured	No			110	Each	1.0000	1	1			
DAS 27 9-89 Location cck016 159434 Loc Qty 1 1 Loc Code 3/10/2018													
647.3802 *647 3802* 212 Upper Cutter Assembly		Manufactured	No			110	Each	8.0000	1	1			
DAS 27 9-89 Location cck030 124717 Loc Qty 8 8 Loc Code 162775													
647.3804 *647 3804* Lower Cutter Assembly High		Manufactured	No			110	Each	0.0000	1	1			
647.4410 *647 4410* Rail		Manufactured	No			110	Each	15.0000	1	1			
DAS 27 9-89 Location CCK081 155358 Loc Qty 15 15 Loc Code 161341													

Monday, June 05, 2017 4:53:46 PM

Shop Packet Print

Page 96

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 97

Work Order ID: 162402

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Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

647.4010 Manufactured No

110 Each 21.0000 1 1

647 4010

Wiper Deflector RH

**

JUN 26 2017

DAS 28
9-89

Location

Loc Qty

Loc Code

cck060

21

120740

1

158472

20

647.4011 Manufactured No

110 Each 9.0000 1 1

647 4011

Wiper Deflector LH

**

JUN 26 2017

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK051

9

155433

9

647.4110 Manufactured No

110 Each 3.0000 1 1

647 4110

Doubler

**

JUN 26 2017

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK080

3

154910

3

647.4111 Manufactured No

110 Each 0.0000 1 1

647 4111

Doubler

**

JUN 26 2017

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK112

5

154921

5

647.4112 Manufactured No

110 Each 5.0000 1 1

647 4112

Clip

**

JUN 26 2017

DAS 87
9-89 SVC

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 98

Work Order ID: 162402

162402

Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

647.4113 Manufactured No

110 Each

6.0000

1 1

**

JUN 26 2017

DAS

5

9-39

DAS

28

9-39

647 4113

Clip

DAS

27

9-39

Location

Loc Qty

Loc Code

CCK112

6

154922

6

647.4114 Manufactured No

110 Each

6.0000

2 2

**

JUN 26 2017

DAS

6

9-39

DAS

28

9-39

647 4114

Shim

Location

Loc Qty

Loc Code

CCK112

6

120746

1

158414

5

647.4115 Manufactured No

110 Each

6.0000

2 2

**

JUN 26 2017

DAS

6

9-39

DAS

28

9-39

647 4115

Shim

Location

Loc Qty

Loc Code

CCK112

6

154293

1

158416

5

647.4116 Manufactured No

110 Each

14.0000

1 1

**

JUN 26 2017

DAS

6

9-39

DAS

28

9-39

647 4116

Shim

Location

Loc Qty

Loc Code

CCK112

14

121064

2

158848

12

DAS

27

9-39

Monday, June 05, 2017 4:53:46 PM

Shop Packet Print

Page 98

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 99

Work Order ID: 162402

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Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

647.4210
647 4210

Bracket LH

DAS
27
9-89

Manufactured No

110 Each

4.0000

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK112

4

155375

4

647.4211
647 4211

Bracket RH

DAS
27
9-89

Manufactured No

110 Each

4.0000

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK112

4

155386

4

647.4212
647 4212

Plate

DAS
27
9-89

Manufactured No

110 Each

10.0000

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK112

10

150884

10

647.4311
647 4311

RH Lower Strut

DAS
27
9-89

Manufactured No

110 Each

3.0000

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK073

3

154294

3

647.4310
647 4310

LH Lower Strut

DAS
27
9-89

Manufactured No

110 Each

13.0000

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK072

13

158229

13

Monday, June 05, 2017 4:53:46 PM

Shop Packet Print

Page 99

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 100

Work Order ID: 162402

162402

Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

647.4312 Manufactured No

110 Each 5.0000 1 1

DAS 28

647 4312

LH Upper Strut

**

JUN 26 2017

Location

Loc Qty

Loc Code

CCK074

5

154503

5

647.4313 Manufactured No

110 Each 13.0000 1 1

DAS 28

647 4313

RH Upper Strut

**

JUN 26 2017

Location

Loc Qty

Loc Code

CCK075

13

154502

5

158436

8

NAS1149FN832P Purchased No

110 Each 1,771.000 34 34

DAS 28

NAS1149FN832P

Washer

**

DAS 6

9-89

JUN 26 2017

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST263

1413

M137412

1413

DAS 27

9-89

34

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 101/6

Work Order ID: 162402

162402

Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

110

Each

1,507.000

157

157

NAS1149F0332P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

275

m133709

275

ST262

1232

m137075

13

m137412

1219

**

DAS
6
9-89

JUN 2 2 2017
DAS
28
9-89

137710 X39

MS27039-1-07

Purchased

No

110

Each

1.0000

12

12

MS27039-1-07

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

1

m137320

1

MS27039-1-10

Purchased

No

110

Each

485.0000

42

42

MS27039-1-10

SCREW

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

15

m129541

15

over006

300

m137597

300

ST280

170

m137164

170

**

DAS
6
9-89

JUN 2 6 2017
DAS
28
9-89

137736 X26

16

MS27039-08-08

Purchased

No

110

Each

151.0000

16

16

MS27039-08-08

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

ST278

151

m130325

151

**

DAS
3
9-89

JUN 2 6 2017

16

Monday, June 05, 2017 4:53:46 PM

Shop Packet Print

Page 101

Picklist Print

Monday, June 05, 2017 4:53:46 PM

Page 102

Work Order ID: 162402

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Parent Item: 647.3704

647.3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-09

Purchased

No

110

Each

223.0000

14

14

DAS

MS27039-1-09

Screw

**

6

9-89

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

FP001

17

18057

17

GA

18

124859

18

ST280

188

m137544

188

DAS

6

9-89

MS27039-08-11

Purchased

No

110

Each

274.0000

2

2

MS27039-08-11

SCREW

**

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

ST278

274

m135864

24

m137412

250

DAS

6

9-89

MS24694-S49

Purchased

No

110

Each

164.0000

1

1

MS24694-S49

Screw

**

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

over006

100

m129499

100

ST284

64

m129702

64

DAS

6

9-89

MS24694-C53

Purchased

No

110

Each

38.0000

8

8

MS24694-C53

Screw

**

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

ST285

38

m136444

38

DAS

6

9-89

Monday, June 05, 2017 4:53:46 PM

Shop Packet Print

Page 102

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 103

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Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

601.3073

Purchased No

110

Each

0.0000

1

1

601.3073

Connector 082-4440

AN3-4A

Purchased No

110

Each

341.0000

3

3

AN3-4A

Bolt

Location

Loc Qty

Loc Code

ST350

341

m137478

341

Purchased No

110

Each

220.0000

8

8

AN3-11A

AN3-11A

Bolt

Location

Loc Qty

Loc Code

over003

100

m136192

100

ST349

120

153855

120

Purchased No

110

Each

22.0000

2

2

AN3C10A

AN3C10A

Bolt

Location

Loc Qty

Loc Code

ST349

22

m136983

2

m137321

20

Purchased No

110

Each

83.0000

5

5

CR3212-4-2

CR3212-4-2

Cherry Rivet

Location

Loc Qty

Loc Code

ST320

83

m137164

83

DAS

27

9-89

with ship later DATE 6-27

B: 163189

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

DAS

9-89

JUN 29 2017

JUN 26 2017

JUN 26 2017

JUN 26 2017

JUN 26 2017

JUN 26 2017

Monday, June 05, 2017 4:53:47 PM

Shop Packet Print

Page 103

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 104

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Parent Item: 647.3704

647 3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-3 Purchased No

110 Each 241.0000 17 17

CR3212-4-3

Cherry Rivet

**

JUN 26 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK003

200

m136741

200

ST320

41

m135408

41

CR3212-4-4 CR3212-4-04 Purchased No

110 Each 0.0000 7 7

CR3212-4-4

CHERRY RIVET

**

136263

JUN 26 2017

DAS
28
9-89

CCR264SS3-04 Purchased No

110 Each 129.0000 12 12

CCR264SS3-04

Rivet

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST321

129

123785

29

m137391

100

CCR264SS-3-03 Purchased No

110 Each 141.0000 16 16

CCR264SS-3-03

Cherry Rivet

**

JUN 26 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

10

m137164

10

LG001

13

m134023

13

ST321

118

m137164

118

DAS
27
9-89

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 105

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647 3704

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Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-2 Purchased No

110 Each 168.0000 31 31

CR3213-4-2

Cherry Rivet

**

DAS

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

CCK003

100

m137621

100

ST320

68

m137412

68

CR3213-4-3 Purchased No

110 Each 246.0000 24 24

CR3213-4-3

Rivet, Cherry

**

DAS

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

GA

92

m136042

92

ST319

154

m136851

154

CR3213-4-4 Purchased No

110 Each 308.0000 16 16

CR3213-4-4

Rivet, Cherry

**

DAS

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

CCK003

200

m137391

200

ST319

108

m136301

108

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 106

Work Order ID: 162402

162402

Parent Item: 647.3704

647.3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-5 Purchased No

110 Each 202.0000 28 28

CR3213-4-5
Rivet

**

DAS

DAS
28

DAS
28

Location

Loc Qty

Loc Code

CCK003

200

M137459

200

ST319

2

M137361

2

CR3213-4-8 Purchased No

110 Each 91.0000 4 4

CR3213-4-8
Rivet

**

DAS

DAS
JUN 2 6 2017 28

DAS
28

Location

Loc Qty

Loc Code

ST319

91

m136983

91

MS21042-3 MS21042L3 Purchased No

110 Each 0.0000 79 79

MS21042-3
Nut

**

DAS

DAS
28

137680

JUN 2 6 2017

MS21042-08 MS21042L08 Purchased No

110 Each 0.0000 18 18

MS21042-08
USE MS21042L08

**

DAS

DAS
28

JUN 2 6 2017 137391

MS21047L06 Purchased No

110 Each 39.0000 6 6

MS21047L06
Nut Plate

**

DAS

DAS
28

JUN 2 6 2017

DAS
28

Location

Loc Qty

Loc Code

ST301

39

m137166

39

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 107

Work Order ID: 162402

162402

Parent Item: 647.3704

647.3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

MS21047L08

Purchased

No

110

Each

31.0000

6

6

MS21047L08

Nut Plate

**

DAS

6

DAS

28

JUN 26 2017

DAS
27
8-89

Location

Loc Qty

Loc Code

ST301

31

m136406

6

m137615

25

MS21047-3

Purchased

No

110

Each

161.0000

4

4

MS21047-3

Nut Plate

**

DAS

6

9-89

DAS

28

9-89

JUN 26 2017

DAS
27
8-89

Location

Loc Qty

Loc Code

ST301

161

m137075

11

m137459

150

MS21071L3

Purchased

No

110

Each

76.0000

4

4

MS21071L3

ANCHOR NUT

**

DAS

3

0-89

DAS

28

0-89

JUN 26 2017

DAS
27
8-89

Location

Loc Qty

Loc Code

S299

50

m137680

50

ST299

26

125654

26

601.3083

Manufactured

No

110

Each

4.0000

1

1

601.3083

Adhesive Rubber Seal

**

68-6

9

0-89

DAS

28

0-89

JUN 26 2017

DAS
27
8-89

Location

Loc Qty

Loc Code

ck009

4

159136

4

Monday, June 05, 2017 4:53:47 PM

Shop Packet Print

Page 107

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 108

Work Order ID: 162402

162402

Parent Item: 647.3704

647.3704

Parent Item Name: 204,205,212,214 Cable Cutter System, High

Start Date: 6/9/2017

Required Date: 6/21/2017

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No

110 Each 31.0000

600 1012

Sealant PR1425B2 (#654 sem)

**

DAS
27
9-89

JUN 26 2017

DAS
28
9-89

DAS
27
9-89

12/2017

Location

Loc Qty

Loc Code

cck017

31

m136838

1

m137321

2

m137371

14

m137699

14

601.2045 Purchased No

110 Each 25.0000

601 2045

RTV (LOCTITE 598) McMaster p/n: 6641A41

**

DAS
27
9-89

JUN 26 2017

DAS
28
9-89

4/2019

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK096

7

m137538

7

CCK108A

10

m137538

10

GA

8

m134260

8



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO.

04881

SHEET 1 OF 1

DWG NO. 647.3700

REV: N/C

PREPARED BY J. BECKER

DATE: 02/26/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR *[Signature]*

MFG:

[Signature]

QC

[Signature]

EFF.

NEXT ORDER

REASON: DELETED F/N 57, REVISED F/N 6.

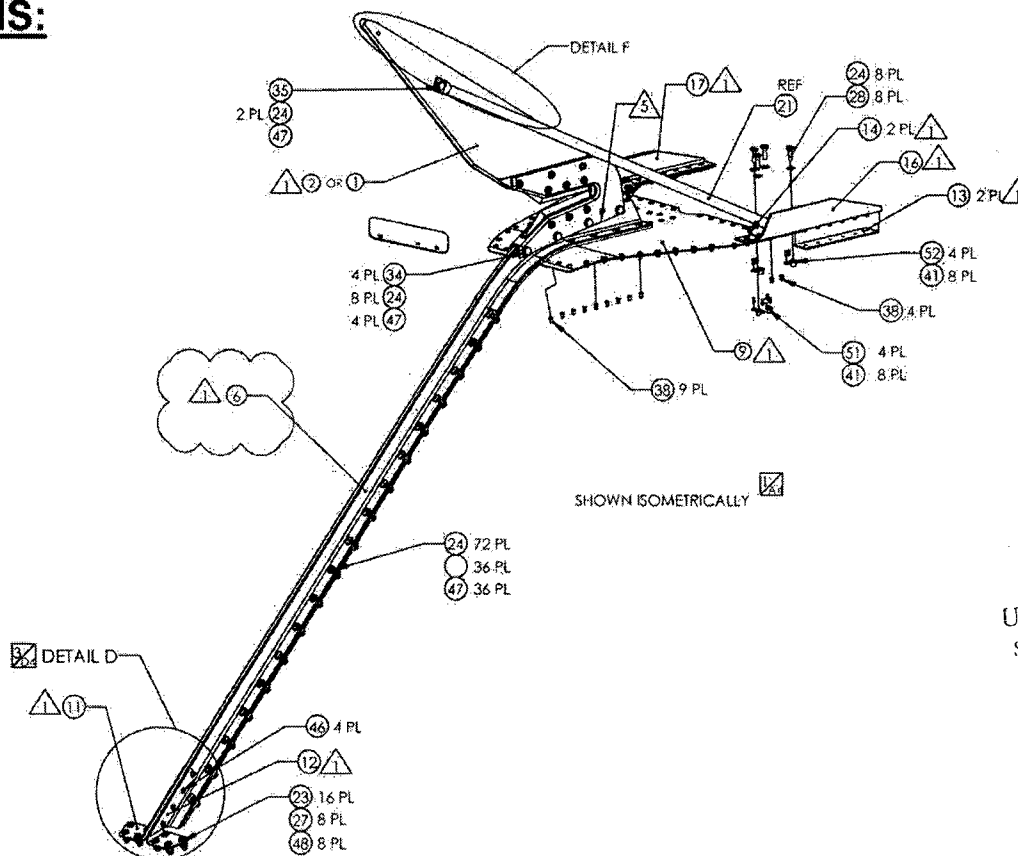
ECR:

N/A

ACTION ITEM:

1.

SHEET 1, ZONE C5 IS:



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 162402 MJS
170672

57	D	647.3916	1	1	1	1	DEFLECTOR UPPER HALF			
6	R	647.3903	1	1	1	1	DEFLECTOR ASSEMBLY			
F/N	TC	PART NUMBER	3704	3703	3702	3701	DESCRIPTION	MATERIAL	SPECIFICATION	
			QTY							
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED		
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO		



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

04845

SHEET 1 OF 1

DWG NO. 647.3700

REV: N/C

PREPARED BY

J. BECKER

DATE: 02/11/15

EFFECT ON DWG

☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF:

NEXT ORDER

TRANSACTION CODES (TC):

A-ADD
R-REVISE

C-CREATE
D-DELETE

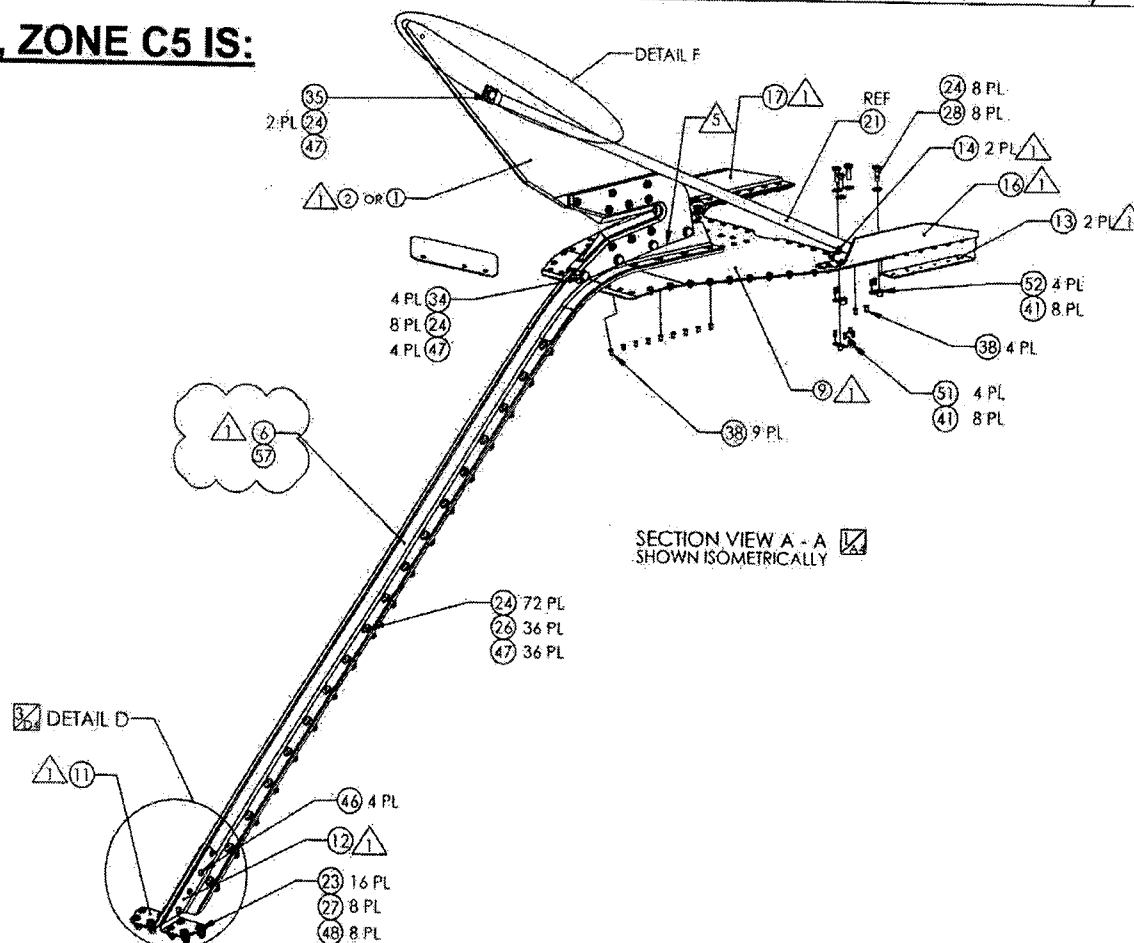
REASON: ADDED F/N 57

ECR:

ACTION ITEM:

1.

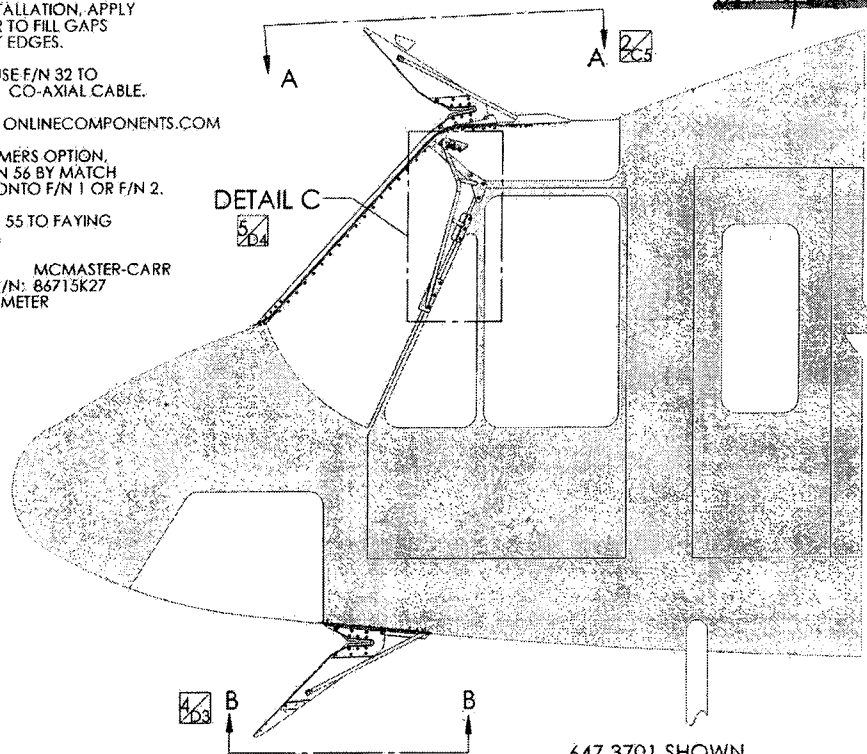
SHEET 1, ZONE C5 IS:



57	A	647.3916	1	1	1	1	DEFLECTOR UPPER HALF							
F/N	TC	PART NUMBER	3704	3703	3702	3701	DESCRIPTION				MATERIAL		SPECIFICATION	
			QTY											
DOCUMENTS EFFECTED:										CHANGE CATEGORY		DER REVIEW REQUIRED		
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM										☐ MAJOR ☒ MINOR		☐ YES ☒ NO		

NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
- 2 IF REQD. USE F/N 32 TO CONNECT CO-AXIAL CABLE.
- 3 VENDOR : ONLINECOMPONENTS.COM
- 4 AT CUSTOMER'S OPTION, INSTALL F/N 56 BY MATCH DRILLING ONTO F/N 1 OR F/N 2.
- 5 APPLY F/N 55 TO FAYING SURFACES.
- 6 VENDOR : MCMMASTER-CARR
VENDOR P/N: 86715K27
60A DUROMETER



647.3701 SHOWN

REF.	REF.	REF.	REF.	56	647.5701	GPS MOUNT KIT		
A/R	A/R	A/R	A/R	55	601.2045	RTV	LOCTITE 998	
A/R	A/R	A/R	A/R	54	601.1012	SEALANT	PK1325	
1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	CL-300B	
4	4	4	4	52	601.2957	NUT/PLATE	ML-8-304S	
4	4	4	4	51	600.0795	NUT/PLATE	M5210713	
6	6	6	6	50	601.3066	NUT/PLATE	M521047-3	
6	6	6	6	49	601.3065	NUT/PLATE	M521047P00	
18	18	18	18	48	601.2973	LOCKNUT	M521047U06	
79	79	79	79	47	601.2943	LOCKNUT	M521042-99	
4	4	4	4	46	601.2364	CHEERY RIVET	M52102-3	
28	28	42	42	45	601.1183	CHEERY RIVET	CR3215-4-6	
16	16	19	19	44	601.1915	CHEERY RIVET	CR3215-4-5	
24	24	32	32	43	601.0790	CHEERY RIVET	CR3213-6-4	
31	31	13	13	42	601.1039	CHEERY RIVET	CR3215-5-3	
3704	3703	3702	3701	41			CR3215-4-2	
				FINO	PART #	DESCRIPTION	MATL	SPEC.

UNINCORPORATED ECN(S)

07728, 04845, 04881

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION #1		NIC
MAC	INITIAL RELEASE	09-28-69	P. MAVER

[illegible]

QTY

NEXT ASSY 19

PARTS US

AF

APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

412 CABLE CUTTERS KIT

SIZE	CAGE CODE
.8	07M16
SCALE NO	

647.3700

RCV,
N/C

SCALE NONE

SHEET 1 OF 5

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SECTION VIEW A - A
SHOWN ISOMETRICALLY

DETAIL D

DETAIL F

TYPICAL GPS MOUNT KIT INSTALLATION

3/04

1 11

46 4 PL

12 1

23 16 PL

27 8 PL

48 8 PL

24 72 PL

26 36 PL

47 36 PL

1 6

4 PL 34

8 PL 24

4 PL 47

1 2 OR 1

2 PL 24

35

47

5

17 1

REF 21

24 8 PL

28 8 PL

14 2 PL 1

16 1

13 2 PL 1

52 4 PL

41 8 PL

38 4 PL

51 4 PL

41 8 PL

9 1

38 9 PL

REF 56 4 1

REF 1 OR 2

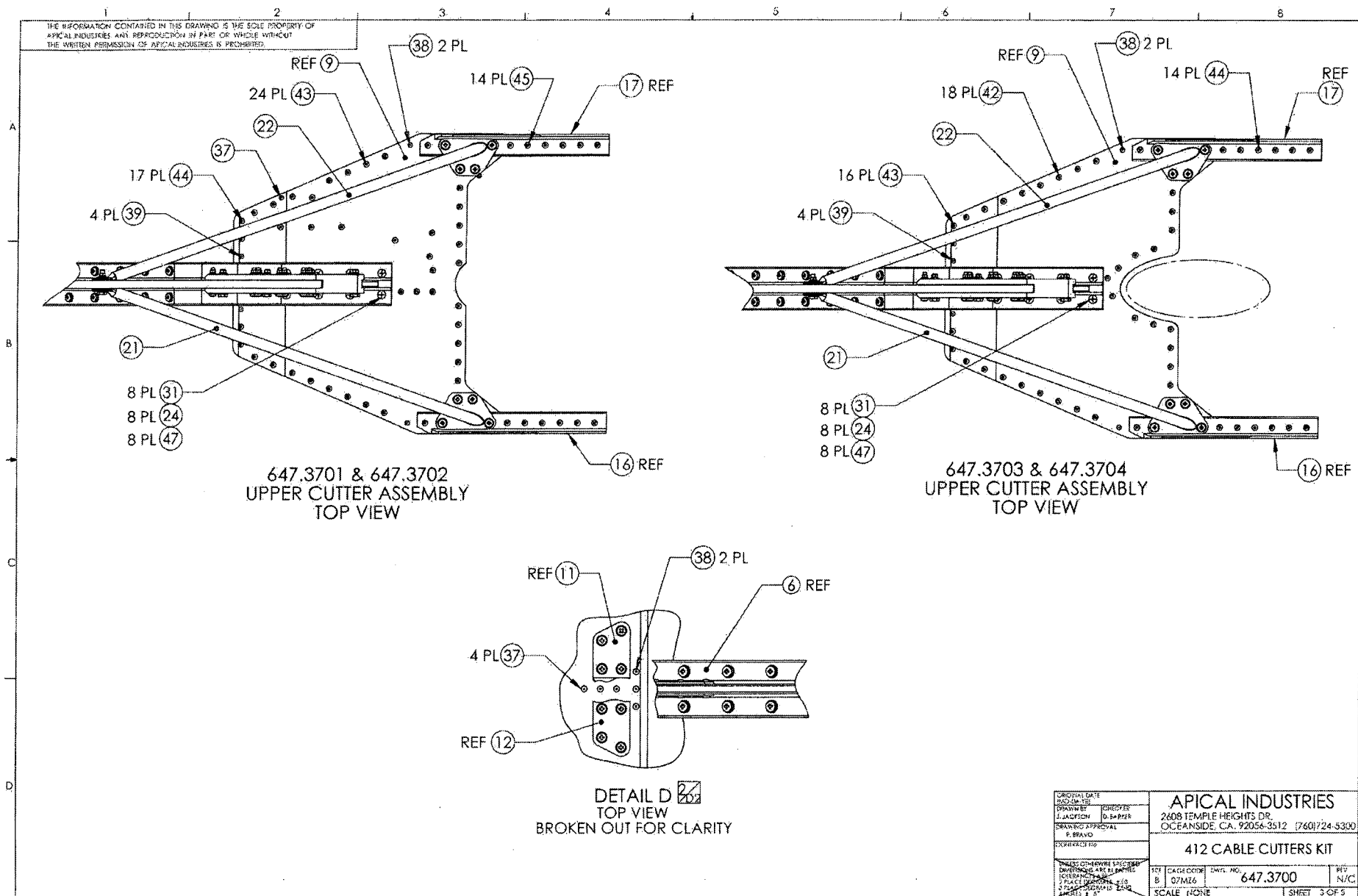
REF 1 OR 2

APICAL INDUSTRIES	
2608 TEMPLE HEIGHTS DR.	
OCEANSIDE, CA 92056-3512 (760) 724-5300	
412 CABLE CUTTERS KIT	
REV	CHG/GRN
B	07M26
DATE	647.3700
SCALE	AS SHOWN
DATE	11/01
BY	11/01

DETAIL F
TYPICAL GPS MOUNT KIT INSTALLATION

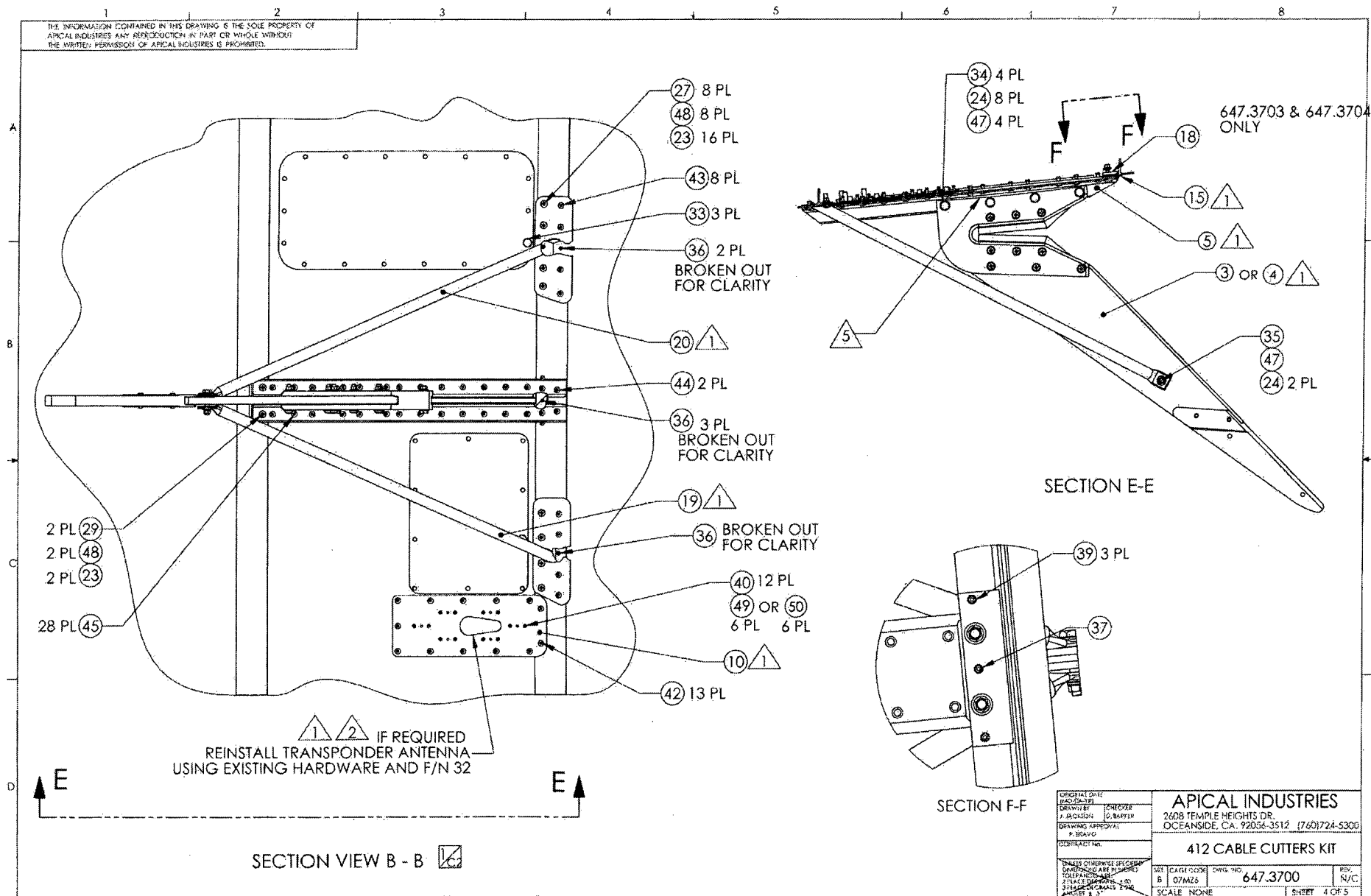
[illegible]

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ORIGINAL DATE 1/10/01		APICAL INDUSTRIES	
DRAWN BY J. JACKSON		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5330	
CHECKED BY D. BARBER		412 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAND		KIT CODE 647.3700	
EXAMINED BY		DWG. NO. 07M16	
DIMENSIONS AND TOLERANCES DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS 2 PLACE DECIMALS ±.005 3 PLACE DECIMALS ±.002 HOLE DIA. ±.005 HOLE DIA. ±.005		SCALE NONE	
		SHEET 3 OF 5	

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BROKEN OUT FOR CLARITY
RH SIDE ONLY

LH ⑧
OR
RH ⑦

DETAIL C 
LH SHOWN, RH OPPOSITE
2 PL

②⑧ 3 PL
②④ 6 PL
④⑦ 3 PL

⑤③ TRIM TO FIT

②⑥ 3 PL
②④ 6 PL
④⑦ 3 PL

②⑤ 6 PL
②④ 12 PL
④⑦ 6 PL

OPTIONAL DATE
DESIGNED BY
J. JACOBSON
DESIGNED BY
D. BARKER
DESIGNED BY
P. BARKER
DESIGNED BY

DESIGNED BY
P. BARKER
DESIGNED BY

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300

412 CABLE CUTTERS KIT

REV. 8 07/2006 DWG. NO. 647.3700 REV. N/C
SCALE NONE SHEET 5 OF 5

Tuesday, June 06, 2017 4:57:32 PM

Page 1

120	QC4- 100% Inspect kits for completeness	0.00	
120			
QC	Memo	0.03	
Quality Control			

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SR02289LA

This Certificate issued to

Apical Industries, Inc. dba Dart Aerospace
3030 Enterprise Court, Suite A
Vista, California 92081

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 29 and CAR 7 of the Federal Aviation Regulations.*

Original Product Type Certificate Number:

Make:

Model:

* See attached FAA Approved Model List (AML)
Number SR02289LA for list of approved aircraft
models and applicable airworthiness regulations.

Description of Type Design Change: Installation of Apical Industries, Inc. Cable Cutters Kit in accordance with FAA approved Apical Industries, Inc. Master Document List MD412-101, Revision A, dated December 23, 2009, or later FAA approved revision.

Limitations and Conditions: This approval requires the inspections and overhaul schedules to be performed as mandated by Apical Industries, Inc.'s Instructions for Continued Airworthiness, ICA412-101, Revision N/C, dated January 5, 2010, or later FAA accepted revision.

This installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of this permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 29, 2009

Date reissued: August 7, 2014

Date of issuance: April 27, 2010

Date amended:

By direction of the Administrator



Haifa Haj-Eid
(Signature)

Haifa Haj-Eid
Supervisor, Technical and Administrative
Support Staff
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.